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In the claims:

Please amend the claims as shown below:

- 5 1. (Currently amended) A method for dewatering and washing a  
lime mud (106) before dewatered lime mud is transported to a  
lime mud kiln, comprising: (200) characterized in  
~~that the dewatering of the lime mud takes place in a~~  
pressurised pressurized filter (102),  
10 ~~that the pressurised connecting the pressurized filter (102)~~  
is connected to a closed gas circulation system (101),  
~~that connecting a filtrate tank (108) is connected to a the~~  
filtrate side of the pressurized filter and where a fluid  
level of filtrate (109) is established from the pressurised  
15 pressurized filter (102),  
~~that the pressurised pressurizing the pressurized filter,~~  
~~(102) is pressurised in that~~  
a compressor (111) drawing on its a suction side thereof a  
draws gas phase from the filtrate tank, (108) and a  
20 pressurized side of the compressor pressurizing, via the gas  
circulation system, a lime mud side of pressurises the  
pressurized filter,  
~~(102) on the pressurised side of the compressor, on the lime~~  
~~mud side of the filter, that a certain~~  
25 venting a pre-determined amount of the gas phase is vented  
from the gas circulation system (101),  
and that adding an equivalent pre-determined amount of fresh  
air is added to the a recycled gas phase to with the aim of  
maintaining the a partial pressure of oxygen gas above a pre-  
30 determined minimum level.
2. (Currently amended) The method according to claim 1,

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~~characterised in that the~~ wherein a temperature in the  
~~pressurized~~ ~~pressurised~~ filter (102), including ~~a the~~  
temperature of the recycled gas phase, is maintained above  
75°C, ~~preferably 75-95°C.~~

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3. (Currently amended) The method according to ~~either claim 1~~  
~~or 2, characterised in that the claim 1 wherein an~~ amount of  
residual white liquor in the lime mud (106) does not exceed  
10%, ~~preferably under 5%, of the white liquor that is formed~~  
10 in ~~the~~ a previous causticization step.

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4. (Currently amended) The method according to ~~any one of~~  
~~claims 1-3, characterised in that claim 1 wherein~~ the lime  
mud that has been filtered out from the lime mud is dry-fed  
out from ~~the~~ a disc filter for onwards transportation to the  
lime mud kiln (200).

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5. (Currently amended) The method according to ~~any one of~~  
~~claims 1-4, characterised in that claim 1 wherein~~ de-airing  
of the recycled gas phase is carried out on the pressurized  
pressurised side (p) of the compressor via a de-airing device  
(112a), ~~and in that~~ and an addition of fresh air is carried  
out by an air-supply device (112a) connected to the suction  
side (s) of the compressor.

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6. (Currently amended) The method according to ~~any one of~~  
~~claims 1-4, characterised in that claim 1 wherein~~ de-airing  
of recycled gas phase is carried out on the suction side (s)  
of the compressor at a first distance from ~~the~~ an inlet to  
the compressor via a de-airing device (112a), ~~and in that~~  
and an addition of fresh air is carried out through an  
air-supply device (112a) on the suction side (s) of the

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compressor at a second distance from ~~the~~ an inlet to the compressor, where the first distance is greater than the second distance.

5 7. (Currently amended) The method according to ~~any one of the preceding claims, characterised in that the~~ claim 1 wherein an amount of recirculated gas phase that is exchanged lies within ~~the~~ an interval 5-20%, ~~preferably less than 10%.~~

10 8. (Currently amended) The method according to ~~any one of the preceding claims, characterised in that the~~ claim 1 wherein an amount of recirculated gas phase that is exchanged is regulated such that ~~it~~ the amount depends on a detected process parameter.

15 9. (Currently amended) The method according to claim 8, ~~characterised in that~~ wherein the detected process parameter is the partial pressure of oxygen gas in the pressurized filter.

20 10. (Currently amended) The method according to claim 8, ~~characterised in that~~ wherein the detected process parameter is ~~the~~ a ~~flow rate of flow~~ of lime mud or dewatered lime mud, or parameters that are representative of these flow rates ~~of~~ flow.

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11. (Currently amended) The method according to ~~any one of the preceding claims, characterised in that~~ claim 1 wherein the pressurized ~~pressurised~~ filter is of ~~the~~ a disc filter type.

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12. (Currently amended) An arrangement for washing and dewatering a lime mud before dewatered lime mud is transported to a lime mud kiln, comprising: (200) characterised in that the dewatering of the lime mud takes place in a  
5 pressurised pressurized filter (102),  
that arranging a recirculation line 110 is arranged for a gas phase from the a filtrate side to the of a mud side,  
that connecting the pressurised pressurized filter (102) is connected to a gas circulation system (101) that is  
10 essentially closed,  
that connecting a filtrate tank (108) is connected to the a filtrate side of the pressurized filter and where a fluid level of a filtrate (109) is established from the pressurised pressurized filter, (102) -  
15 that pressurizing the pressurised pressurized filter, (102) is pressurised in that  
a compressor (111) drawing on its a suction side thereof a draws gas phase from the filtrate tank (108) and pressurises a pressurized side of the compressor pressurizing, via the gas  
20 circulation system a lime mud side of the pressurized filter, (102) on the pressurised side of the compressor, on the lime mud side of the filter,  
that venting a certain pre-determined amount of gas phase is vented from the gas circulation system (101), through a  
25 de-airing devices, (113a) and  
that adding an equivalent pre-determined amount of fresh air is added through an air-supply devices (112a) to the a recycled gas phase with to maintain a the aim of maintaining the partial pressure of oxygen gas above a pre-determined  
30 minimum level.

13. (Currently amended) The arrangement according to claim 12, characterised in that wherein the de-airing device (113a) is

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arranged at a position on the ~~pressurized~~ pressurised side (p) of the compressor, and in that the air-supply device ~~(112a)~~ is arranged at a position on the suction side ~~(s)~~ of the compressor.

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14. (Currently amended) The arrangement according to claim 12, ~~characterised in that wherein~~ the de-airing device ~~(112a)~~ is arranged at a position on the suction side ~~(s)~~ of the compressor at a first distance from the compressor (111), and  
10 in that the air-supply device ~~(112a)~~ is arranged at a position on the suction side ~~(s)~~ of the compressor at a second distance from the compressor ~~(111)~~, where the first distance is greater than the second distance.

15 15. (Currently amended) The arrangement according to ~~any one of claims 12-14, characterised in that~~ claim 12 wherein a control unit (140) controls ~~the~~ regulator valves ~~(112), (113), (160) for at least one of de-airing and addition of~~ air.

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16. (Currently amended) The arrangement according to claim 15, ~~wherein characterised in that~~ the control unit 140 receives input signals from sensors 150.

25 17. (Currently amended) The arrangement according to claim 12 wherein the pressurized ~~any one of claims 12-16, characterised in that the pressurised~~ filter (102) is of a the disc filter type.

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